# Overview of Northeast State Low Emission Vehicle Programs

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### **About NESCAUM**

- Northeast States For Coordinated Air Use Management formed in 1967 by the region's Governors.
- Nonprofit association of air pollution control agencies in the 6 New England States, New York & New Jersey.
- Provide technical assistance and policy guidance to member states on air pollution issues of regional concern.

#### **LEV Overview**

- Section 209 of Clean Air Act allows CA special dispensation to regulate vehicles; other states pre-empted.
- Section 177 lets other states copy CA.
- How: Implementation issues surmountable.
- Why: Greater emission reductions; consumer benefits.
- Seven NESCAUM states have adopted.



#### **LEV Implementation Dates**

- MA, NY, and VT have had the LEV program since the 1990's; will have the ZEV mandate in place for MY 2007.
- ME has had LEV in place since 2001 without ZEV; has just adopted ZEV effective MY 2009.
- RI and CT will have LEV/ZEV in place for MY 2008.
- NJ expected to have LEV/ZEV in place for MY 2009.
- All states will have ZEV in place by 2009.



### State Authority to Adopt LEV

- NY, VT have broad authority; did not require legislation to adopt LEV.
- MA, ME passed legislation requiring state to adopt LEV.
- CT has legislation requiring state to adopt LEV and to maintain the same schedule as CA.
- NJ has legislation requiring state to adopt LEV.
- RI adopted via Executive Order; did not require legislation.
- Some states choose legislative approach even when not strictly required.

#### Zero Emission Vehicle Flexibility

- Manufacturers can comply with ZEV mandate exactly as they do in CA.
- But, Northeast states also give automakers more flexibility (as requested by the manufacturers).
- Two flexibility programs:
  - Alternative Compliance Plan (ACP) "Ramp up"
  - Proportional Credits "Bank" of credits; same %'s
- NY, MA, & VT use ACP.
- CT, RI, ME, and NJ will use proportional credits.



# Alternative Compliance Plan

- Manufacturers have been allowed to bank credits beginning in 2002.
- A credit multiplier (extra credit) is applied to all advanced technology vehicles through 2008.
- The programs will be equivalent to CA in 2009 in terms of percentage requirements.
- In New York, 6 of 7 manufacturers chose the alternative compliance plan.



## **Proportional Credits**

- In NJ, CT, RI, and ME the states are providing manufacturers with a credit bank as a gradual ramp-up to the full ZEV mandate.
- Manufacturers are given a bank of credit calculated on the amount of credit banked in California.
- A ratio of sales in CA and in NJ, CT, RI, and ME is used to calculate actual credits.



#### Enforcement of the Standards

- A number of states have provided flexibility to manufacturers in meeting the fleet emissions standards (NMOG).
- A three year grace period for meeting the fleet average standard has been typical.
- All states in the region will enforce the fleet average by 2010.
- A regional enforcement program is being considered.



#### **LEV Incentives**

- MA, VT: None
- NY: Up to \$5,000 rebate for pure electric vehicles.
   Lower sales tax for pure electrics & hybrids.
   Proposed budget has \$2,000 tax credit for hybrids.
- ME Lower sales tax for hybrids and clean fuel.
- NJ No sales tax for pure electric vehicles
- CT None now; some for alternative fueled.
- CA State & some cities offer various incentives.



### Other Program Aspects of LEV

- Enforcement Most states use registration denial as enforcement mechanism.
- NMOG Curve States discussing possible regional NMOG curve for all Northeast states to replace the NMOG curve requirement in each state.
- Warranty Most states use CA's warranty, often incorporated by reference.
- Certification Most states use CARB executive orders, some incorporated by reference.

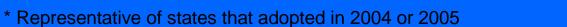
# LEV Benefits in the Northeast 2010 - 2025

Year	NOx Benefit*	VOC Benefit*	Region-wide NOx +VOC tons per day
2010	0.5%	3.0%	37
2015	3.9%	7.5%	45
2020	9.1%	11.6%	50
2025	13.2%	14.3%	56

A reasonable assessment:

Post-2010 changes to CA LEV could increase its stringency, whereas Tier 2 not likely to change soon.

**NESCAUM** 



# Cost History - Auto Emission Controls (incremental per vehicle)

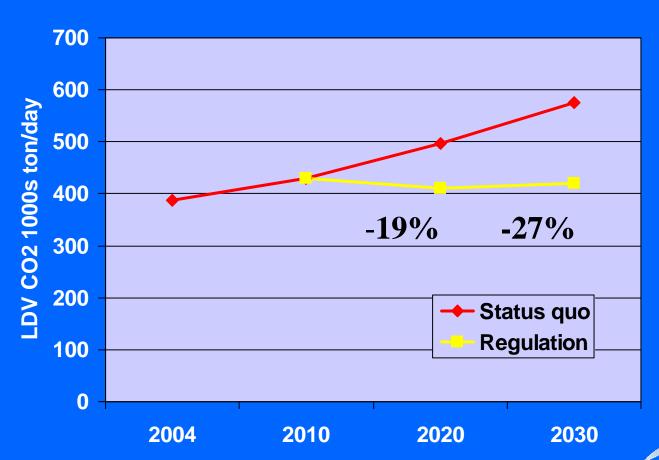
Class	CARB '94	AAMA '94	Actual
TLEV	\$72	\$298-487	\$35
LEV	\$120	\$911-1343	\$83
ULEV	\$227	\$1666-4005	\$251



#### Northeast LEV Provides GHG Reductions

- NESCAUM Study: GHG reductions of 12-54% possible.
- 25% reduction achievable with current & near-term technologies.
- 54% reduction achievable with advanced technologies.
- Reductions up to 47% achievable with cost savings to consumers (even at \$1.58 per gallon).

# Regulation Reduces Greenhouse Gas Emissions





## Net Savings for Vehicle Purchaser

	Near Term (2012)	Mid Term (2016)
Monthly Payment Increase	\$7	\$20
Monthly Operating Cost Savings	\$18	\$23
Monthly Net Savings	\$11	<b>\$3</b>



#### Northeast LEV Future

- In 2009 the LEV program will be implemented in the seven NESCAUM LEV states.
- This includes: ZEV requirement, GHG standards, NMOG requirements.
- All seven states will require the same percentages of advanced technology vehicles as CA.
- A regional NMOG curve may be implemented in that year.



# Thank you for your time and attention!

